## RESPONSE: ENVIRONMENTS AS TOXINS\*

## MINDY THOMPSON FULLILOVE, M.D.

Principal Investigator
HIV Center, Substance Abuse Core

Associate Professor of Clinical Psychiatry and Public Health
New York State Psychiatric Institute
Columbia University
New York. New York

THINK THAT THE VAST MAJORITY of black psychiatrists I have met have been very much preoccupied with issues of the individual in the context of environment. A great deal of psychiatric training directs us to look internally at the thoughts and feelings and emotions of the person sitting with us. But one cannot be a black person in this society without realizing that that fact alone creates great constraints on one's behavior. The first professional paper I presented dealt with the role of skin color in the development of identity. After the presentation, three other black psychiatrists told me they had written on skin color as their first professional paper. I would like to say a little about where my own work has led me in thinking about the relationship between the individual and the environment.

I took physics, as all premedical students do, and found it a puzzling course. Many years later I met a physics professor who believed that physics was a difficult course because much of the course material was counterintuitive. In fact, she proposed that rather than labeling students as "high risk students," educators would be better served by understanding that some courses—like physics—were "high risk courses." This relates to a theme struck by Dr. Barondess, who talked about the dose relationship between adversity and outcomes. If we were to give the same "dose" of adversity to a group of individuals, some would succumb and some would manage to survive. In medicine this is called the  $LD_{50}$ , or the dose which is lethal for 50% of subjects.

I propose that environments can be toxic and that an environment might present so much adversity to individuals that 50% of the individuals will have a poor outcome in that environment. To complete the connection with physics

<sup>\*</sup>Presented as part of a Conference on Strengths and Potentials of Adolescence held by the Committee on Public Health of the New York Academy of Medicine March 8, 1991

courses, let me note that few students succeed in physics, that is, physics courses present a high risk environment to students.

I had another lesson in environments in a program I directed at the University of California, San Francisco. Our program was based on the assumption that structural problems place minority students and women at risk for failure in medical school. We did not employ remedial models. We did not say that minority students were deficient. We said, rather, that the environment is challenging and minority students and women are given the least assistance in understanding how to cope with this new environment. We focused on the nature of the transition and the information needed to succeed. Though we faced some challenging problems in pinpointing the keys to success, we were able to develop a program that proved immensely useful to students.

An interesting outcome of that program, which began as a program for minority and women students, was that it was enthusiastically adopted by the whole medical school. This year, 120 or 140 first year students at UCSF participated in the program. The dean of students commented it was the least stressful program in her domain. Perhaps that was so because the program organized the environment to assist transitioning youth, and to solve the problem of, "How do I cope in this difficult environment?"

Let me say a little more about the specificity of environments. I thought that Dr. Baldwin's point comparing environments—the young person who in one environment will be the class president but in another will be the local drug dealer—is critical. An equally important corollary to her remark is that people are not necessarily able to change environments. Many people do not get the option of saying, "This is a bad environment, I don't want to be a drug dealer, therefore I'm moving to Scarsdale." In fact, taking people where they are is a critical part of our work.

We have just finished a study of young people living in the Bayview-Hunter's Point section of San Francisco, one of the city's black ghettos. In fact, many of the young people we interviewed were potential class presidents who had become drug dealers. In the context of Bayview-Hunter's Point, there is little to sustain young people's hopes for the future. The schools are abysmal, there are few recreational activities (and even fewer opportunities for girls than exist for boys), and little adult supervision. Young people entering adolescence emerge from the control of the family into the control of their peers at perilously young ages: between nine and 11 years old for boys and between 11 and 13 years old for girls. In the context of an immature peer group in a deprived environment, adolescents initiate risky drug-using and sexual behaviors.

The City of San Francisco, in part because of these research findings, implemented a recreation program in one of the housing projects in Bayview. While it may seem a simple thing to do, the recreation program made a great impact on the lives of the young people. They had something positive to do. They came in closer contact with adults. Peer group activities were contained in something other than the streets. It changed the structure of the environment for those young people.